PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 5 :
G01N 33/566, 33/567
C07C 211/02, 211/16, 211/27
C07H 21/00, C07K 5/00, 7/00
C12N 15/12, A61K 37/02

A1

(11) International Publication Number: WO 93/04373

(43) International Publication Date: 4 March 1993 (04.03.93)

(21) International Application Number: PCT/US92/07175

(22) International Filing Date: 21 August 1992 (21.08.92)

(30) Priority data:
749,451 23 August 1991 (23.08.91) US
834,044 11 February 1992 (11.02.92) US

(60) Parent Applications or Grants
(63) Related by Continuation
US 07/934,161 (CIP)
Filed on 21 August 1992 (21.08.92)
US 07/834,044 (CIP)
Filed on 11 February 1992 (11.02.92)
US 07/749,451 (CIP)
Filed on 23 August 1991 (23.08.91)

(71) Applicant *(for all designated States except US)*: NPS PHARMACEUTICALS, INC. [US/US]; 420 Chipeta Way, Salt Lake City, UT 84108 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)* : NEMETH, Edward, F. [US/US]; 3258 E. Fortuna Drive, Salt Lake City, UT 84124 (US). VAN WAGENEN, Bradford, C. [US/US]; 1070 East 300 South, #507, Salt Lake City, UT 84102 (US). BALANDRIN, Manuel, F. [US/US]; 5787 South 1585 East, Salt Lake City, UT 84121 (US).

(74) Agents: WARBURG, Richard, J. et al.; Lyon & Lyon, 611 West Sixth Street, 34th Floor, Los Angeles, CA 90017 (US).

(81) Designated States: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US , European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG).

Published
With international search report.

(54) Title: CALCIUM RECEPTOR ACTIVE MOLECULES

(57) Abstract

Method and composition useful for treating a patient having a disease characterized by an abnormal level of one or more components, the activity of which is regulated or affected by activity of one or more Ca^{2+} receptors. Novel compounds useful in these methods and compositions are also provided. The method includes administering to the patient a therapeutically effective amount of a molecule active at one or more Ca^{2+} receptors as an agonist or antagonist. Preferably, the molecule is able to act as either a selective agonist or antagonist at a Ca^{2+} receptor of one or more but not all cells chosen from the group consisting of parathyroid cells, bone osteoclasts, juxtaglomerular kidney cells, proximal tubule kidney cells, keratinocytes, parafollicular thyroid cells and placental throphoblasts and a pharmaceutically acceptable carrier.